Advanced Satellite Manufacturing

UTAH STATE UNIVERSITY

CENTER

The Center for Advanced Satellite Manufacturing is seeking to create a viable Utah-based satellite manufacturing enterprise based upon years of expertise and projects within Utah State University and its Space Dynamics Laboratory. The Center is pursuing the development of novel advanced manufacturing and design techniques to reduce the cost and time involved with satellite manufacturing while improving quality and performance.

TECHNOLOGY

The Center received $25,000 of seed money during the '04-'05 year. This money enabled the Center to seek and win STTR funding from the National Science Foundation and to increase its visibility to outside organizations by participation in conferences, presentations at government and industry locations, and development of new proposals for funding. It also provided impetus for USU to spend $185,000 of its own money to purchase the Ultrasonic Consolidation equipment necessary for furthering the research in this area.

Ultrasonic Consolidation is the primary advanced manufacturing technology upon which advanced satellite manufacturing techniques are being developed. Combining advanced manufacturing tools with new design techniques should yield highly modular and easy to build, reliable satellites that can accommodate a wide variety of different functions, thus placing Utah in the leadership in small satellite manufacturing.

ACCOMPLISHMENTS

Establishment of the Center and building the infrastructure needed for future work in this area.

THINK TANK

What if there was...

A way to make modular, standardized small satellites so that the development of new satellites with new functions was "plug and play"?

Brent Stucker
Utah State University
Eng. Bldg. Rm. 419H
4110 Old Main Hill
Logan, UT 84322-4110
+1 435-797-8173
brent.stucker@usu.edu